Applicant:Robert M. Danen
Filed: August 6, 2003
Customer No. 03000
For:METHOD FOR CORRECTING VESSEL...
Docket No.: V1025/20184
Sheet 1 of 4

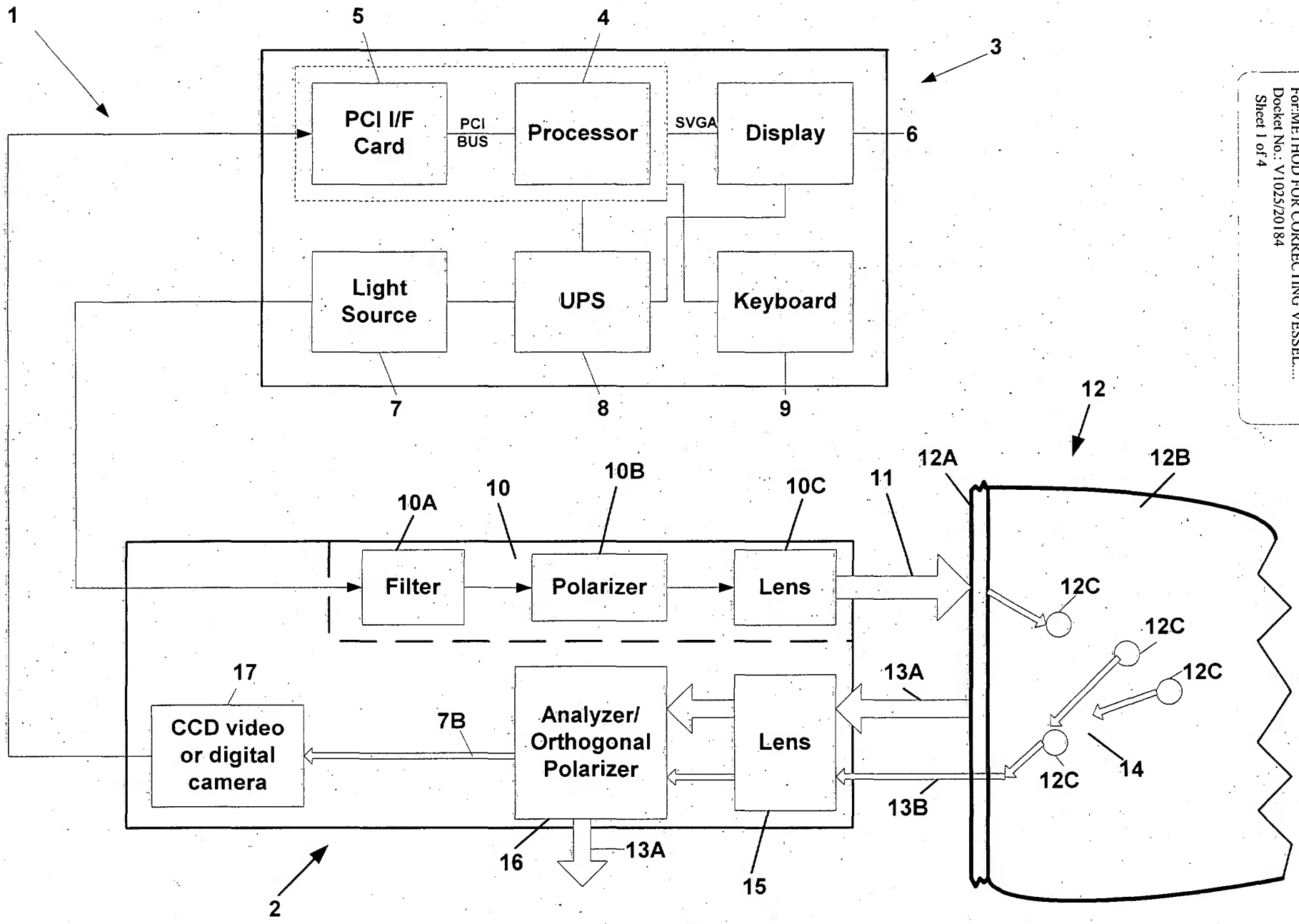

Fig. 1

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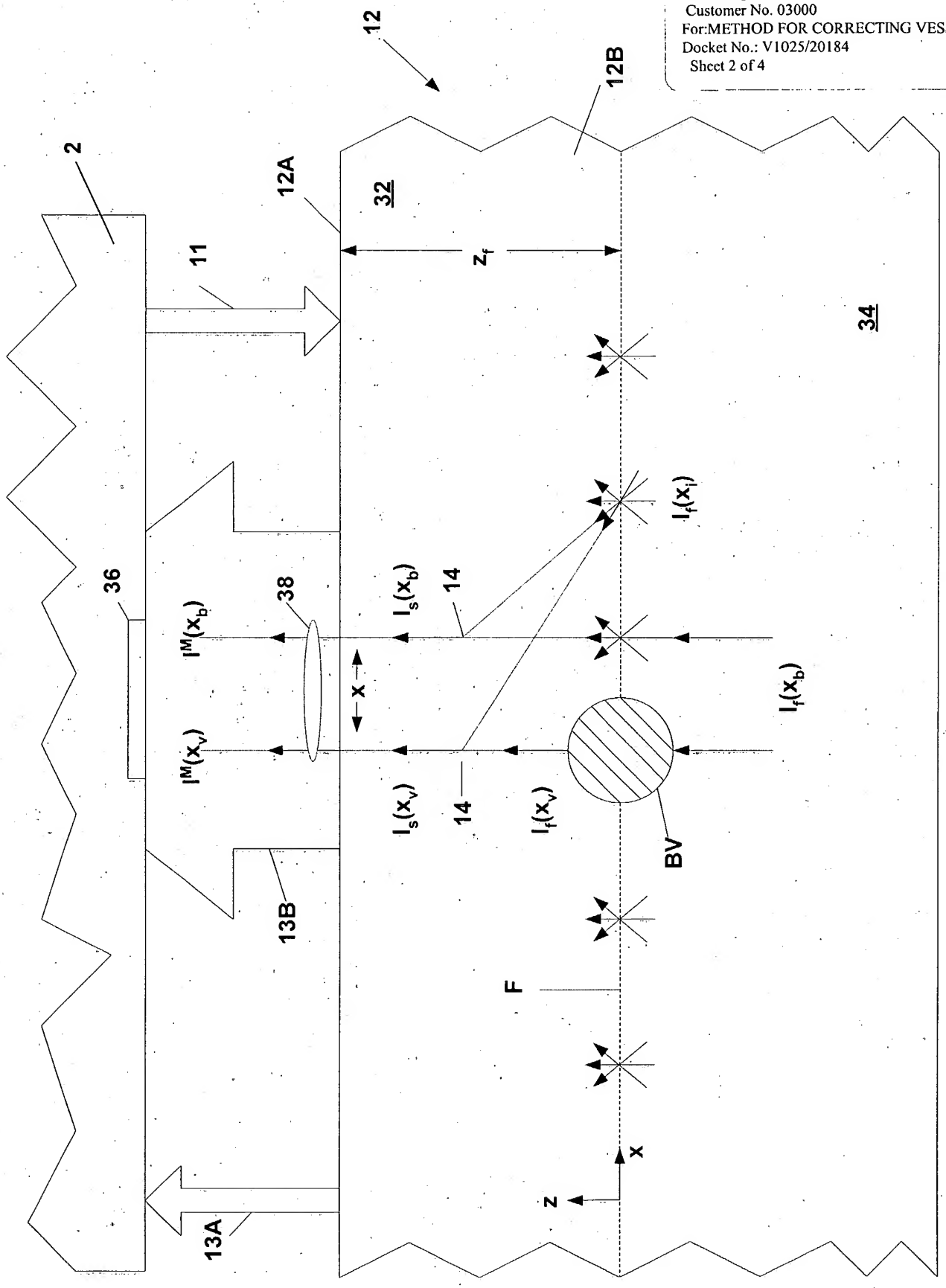

Fig. 2

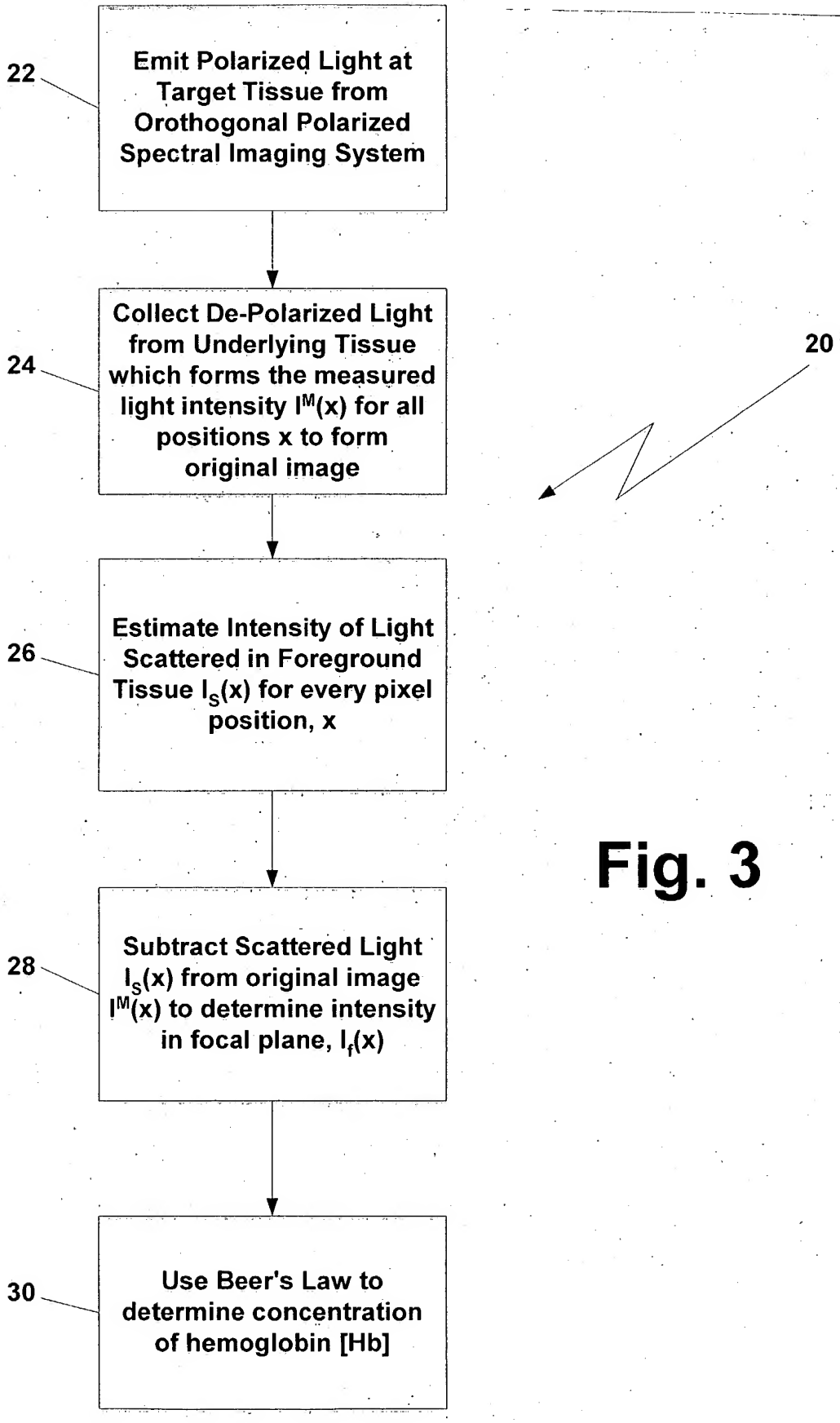
22
Emit Polarized Light at Target Tissue from Orothogonal Polarized Spectral Imaging System
24
Collect De-Polarized Light from Underlying Tissue which forms the measured light intensity $I^M(x)$ for all positions x to form original image
20
26
Estimate Intensity of Light Scattered in Foreground Tissue $I_S(x)$ for every pixel position, x
28
Subtract Scattered Light $I_S(x)$ from original image $I^M(x)$ to determine intensity in focal plane, $I_f(x)$
30
Use Beer's Law to determine concentration of hemoglobin [Hb]

Fig. 3

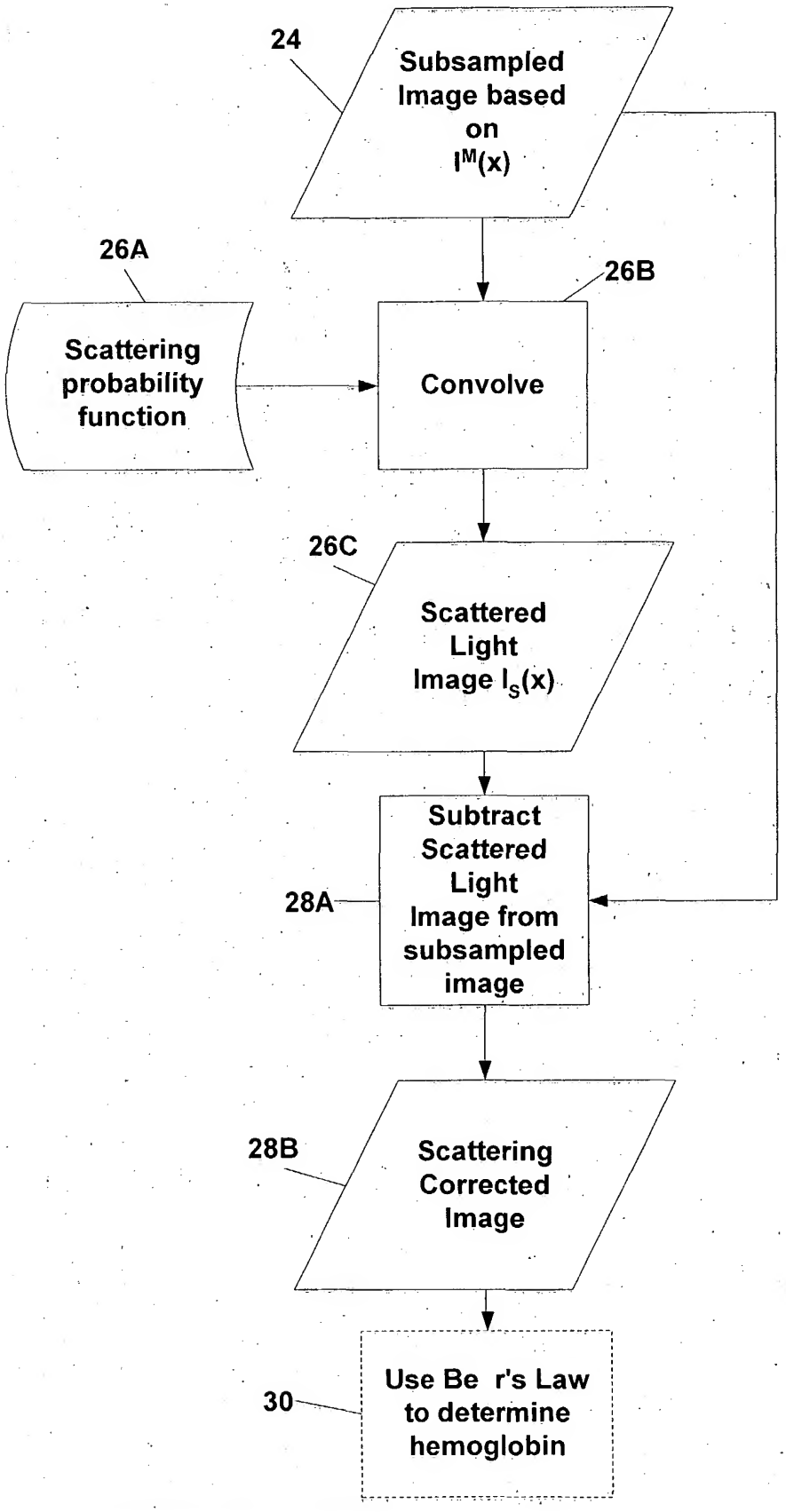
24
Subsampled Image based on $I^M(x)$
26A
Scattering probability function
26B
Convolve
26C
Scattered Light Image $I_S(x)$
Subtract Scattered Light Image from subsampled image
28A
28B
Scattering Corrected Image
Use Be r's Law to determine hemoglobin
30

Fig. 4